



Australia and India: Facing the twenty-first century skills challenge

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Australia and India: Facing the twenty-first century skills challenge

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The governments of India and Australia are working to enhance cooperation on training, at both official and industry level. As part of the exchange of ideas, Francesca Beddie, General Manager, Research, National Centre for Vocational Education Research, visited India in August 2009 at the invitation of the Australia–India Council. This paper is an expanded version of the speech she delivered at the second Global Skills Summit organised by the Federation of Indian Chambers of Commerce.

Australia and India are very different countries in terms of population, income per capita, major industries and economic sectors, yet they share features of relevance to the development of skills in the twenty-first century. Like Australia, India is a federation with responsibility for education and training shared between the national and state governments. In both countries, distance is a factor for many industries, including the training sector. Although higher education is of considerable importance and highly valued in Australia and India, future gains in productivity will also depend on developing the supply of trained workers with intermediate-level knowledge and skills. This will lead not only to demand for whole vocational qualifications but also part-qualifications or skill sets.

Key messages

- ✧ Further exchanges at the national government level could explore issues of mutual interest in the following:
 - ◆ the development of qualifications frameworks suited to a global labour market
 - ◆ the engagement of industry in a national training system
 - ◆ the necessity for training that is both suitable to the learner and delivers high-quality outcomes.
- ✧ There is scope to think more about cooperation on flexible delivery models that harness both technology and strong teaching skills.
- ✧ At this stage in the development of the Indian system, cooperation at the provider level is likely to be most fruitful at the level of vocational teacher education.

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Introduction

Learning is a driver of knowledge-based economies; hence, countries around the world face common challenges to ensure they have the human capital to invest in progress and prosperity.

This means that, despite the vast difference in scale and stage of development, Australia and India face common twenty-first century training challenges to produce more skilled people, who are employable and who are able to build economies that can cope with rapid change. And to do so in ways that ensure equity and preserve the environment.

Moreover, we have the potential to learn from each other, particularly in terms of governance, but also in the design and delivery of training. In this paper, I explain briefly the framework for Australian vocational education and outline the drivers for the current reform agenda in Australia. This agenda is discussed with reference to India's vision for its skills development over the next decade. The paper also identifies some areas of common challenge and potential cooperation.

Box: Australia versus India

Federation (1901): 6 states (former British colonies) and 2 territories

Population of 21 million in a land area of 7.7 million square km

GDP: USD 756 billion (2006)

Informal economy¹ about 10–15% of GDP and working-age population

Number of VET students 2008: 1.7 million

Exports 21% of GDP (minerals, agriculture, education)

Federation (1949): 29 states/territories (former British control)

Population of 1150 million in a land area of 3.3 million square km

GDP: USD 887 billion (2006)

Informal economy about 85–90% of GDP and working-age population

Number of VET students: c. 3 million

Exports 22% of GDP (manufactures, business services)

¹ In the lexicon of the International Labour Organization, the informal economy covers a variety of activities and labour relations: self-employed workers of individual microenterprises; auxiliary family member workers in enterprises of the formal or the informal sector; members of cooperatives of informal producers; outsourced home-based work; those undertaking survival activities (street vendors, waste collection etc.) <<http://www.ilo.org/public/english/region/ampro/cinterfor/temas/informal/about.htm>>.

The Australian system

Australia's national vocational education and training (VET) system was initiated in the late 1980s under what was called the National Training Reform Agenda. This agenda reflected important shifts taking place in post-compulsory education, including the move to a mass system of higher education and to equipping the workforce with recognised qualifications. One critique of this reform (Aeuckens 2000) suggests that the institutional changes were not sufficient to allow the distinct educational sectors to work well together. This remains a problem today.

The reform did see an attempt to better unify the operation of the eight separate state and territory training systems and to build a national qualifications framework. This led to the establishment of the Australian National Training Authority (ANTA) in 1994. ANTA no longer exists, but the goal of having a national system of governance, with a strong role for industry, remains. Nevertheless, it is the states that are the primary funders of public training, and therefore keenly interested in retaining a role in the regulation of the system.

The current system is based on three pillars: the Australian Qualifications Framework (AQF); training packages developed in accordance with competency-based training (CBT); and the Australian Quality Training Framework (AQTF). Collectively they are referred to as the National Skills Framework.

Australian Qualifications Framework

The AQF is a system of national qualifications in schools and in the vocational education and training and the higher education sectors. It was introduced to ensure consistency of training and a framework for a single system of school, work-based qualifications and academic qualifications. It has, however, proved difficult to streamline articulation from VET to higher education, particularly because of the different philosophical bases upon which courses or training are developed and assessed. An important principle of the system is that it produces portable, nationally recognised qualifications.

Competency-based training

The second pillar—competency-based training—tries to bridge the gap between education and job requirements. A competency is made up of skills, knowledge and attitudes. In other words, achieving competency can require more than a training course. It draws on learning at work and experience of life. The demand for higher-level skills is increasing and with it the range and complexity of competences workers require, and this is testing Australia's training package system. A training package is a set of nationally endorsed standards, guidelines and qualifications used to recognise and assess the skills and knowledge people need to perform effectively in the workplace. Training packages are developed by industry to meet the training needs of an industry or group of industries.

The Australian Quality Training Framework

The Australian Quality Training Framework is designed to ensure that registered training organisations have qualified staff; proper facilities and equipment; and the right training and assessment materials. In addition, those catering to international markets must conform to the *Education Services for Overseas Students (ESOS) Act*, currently under review in the light of the recent collapse of some colleges. The framework relies on the skills of auditors to both ensure compliance and encourage continuous improvement.

Australia's reform agenda

Australia's education system is riding a wave of reform, prompted by the following statistics:

- ✧ The proportion (3.7%) of 15 to 19-year-old Australians not involved in employment, education or training is high by Organisation for Economic Co-operation and Development (OECD) standards, although not by Indian ones.
- ✧ 35% of Australians aged between 25 and 64 years are without upper secondary school or equivalent qualifications.
- ✧ Nearly half of Australians aged 15 to 74 years do not have the literacy and numeracy skills needed to meet the complex demands of everyday life and work (Council of Australian Governments 2008).
- ✧ International education is now Australia's third largest source of overseas earnings, generating \$15.5 billion in 2008 and supporting more than 125 000 jobs. In 2008, nearly half a million students came to Australia (Gillard 2009b). This rapid expansion has put a strain on the system.

The reform agenda is accompanied by targets set by the Council of Australian Governments (COAG) and, in the case of university qualifications, by the Australian Government. These targets are:

- ✧ Halve the proportion of Australians aged 20–64 years without qualifications at certificate III level and above between 2009 and 2020 (Council of Australian Governments 2008).
- ✧ Double the number of higher qualification completions (diploma and advanced diploma) between 2009 and 2020 (Council of Australian Governments 2008).
- ✧ By 2025, 40% of Australian 25 to 34-year-olds should have a bachelor level or above qualification (Gillard 2009a) (at present 32% [Wheelahan 2009]).
- ✧ By 2020, 20% of higher education enrolments at undergraduate level should be from low socioeconomic backgrounds (Gillard 2009a) (currently 16% [Wheelahan 2009]).

In addition, the Australian Government wants to see strong national regulatory arrangements for VET alongside the proposed higher education regulator. One step toward this is the establishment this year of a single tertiary education sector ministerial council. To assist it in this ambitious reform agenda, the Australian Government established a statutory body called Skills Australia to advise the minister on the effectiveness of the higher education and VET systems in meeting Australia's labour market needs.

India's vision for skills

Australia's ambitions are modest when compared with the vision set out in India's National Skills Development Policy (March 2009):

V1) Scale of ambition: At present the capacity of skill development in India is around 3.1 million persons per year. The 11th Five Year Plan envisions an increase in that capacity to 15 million annually. India has target of creating 500 million skilled workers by 2022. Thus, there is a need for increasing capacity and capability of skill development programs.

V2) High inclusivity: The skill development initiatives will harness inclusivity and reduce divisions such as male/female, rural/urban, organized/unorganized employment and traditional/contemporary workplace.

V3) Dynamic and demand-based system planning: The skill development initiatives support the supply of trained workers who are adjustable dynamically to the changing demands of employment and technologies. This policy will promote excellence and will meet the requirements of knowledge economy.

V4) Choice, competition and accountability: The skill development initiative does not discriminate between private or public delivery and places importance on outcomes, users' choice and competition among training providers and their accountability.

V5) Policy coordination and coherence: The skill development initiatives support employment generation, economic growth and social development processes. Skill development policy will be an integral part of comprehensive economic, labour and social policies and programmes. A framework for better coordination among various Ministries, States, industry and other stakeholders will be established.

India's vision is even more ambitious, given that the gap between the current institutional capacity to train and job market entrants is around eight million per year (McKinsey 2009, p.2). The challenge is not only related to training centres; it is also about the status of vocational education and its relevance to industry. The Indian Government recognises that the vocational education and training system is not currently equipped to respond to the needs of the labour market (World Bank 2008). The system is primarily institution-based, relies on outdated curriculum and the majority of its learners have significant gaps in their basic education. The solution in the eyes of both government and industry is a public-private partnership, which will involve joint planning, joint funding and joint delivery.

Common challenges

Given the vast difference in scale, and in the stages of economic development, it is prudent to be modest in exploring where the synergies between the Australian and Indian systems might lie. Nevertheless, it is clear from the Indian vision statement that there are commonalities in thinking about solutions to our skills challenges, which involve creating an inclusive, demand-driven system, with user choice and strong quality controls. It is also possible that India will be able to leapfrog over some of its development hurdles, thanks to its strong technological savvy and English language capacity, and by learning from others.

Developing the right qualifications frameworks

India aims to build a qualifications framework. Australia's was the first, now under review because of changes over the last decade in the structure of both the workforce and the education system. The consultation paper for the review suggests that the framework could be strengthened so that Australia has nationally recognised and consistent qualifications that help learners move through education and work. It also suggests the need for national and international alignment of qualifications (AQF 2009).

Trying, either in Australia or India, to create a seamless framework from early childhood to adulthood is not easy. Fitting non-academic learning into this framework is a particular challenge. For Australia, this is highlighted by the different ways VET and universities assess achievement. Competency-based training places the emphasis on what a person can do rather than on measuring their performance against others. This different approach can make it difficult for people to gain full credit for their learning when they seek to move from VET into higher education.

We still tend to think in terms of a hierarchical framework, where learners follow a continuous pathway upwards, with the development of higher and higher-level skills. But this does not reflect the reality of today's labour market. People no longer stay in jobs for a lifetime. They make many career changes. And even if they do not, the jobs they have change in response to technological, environmental and market forces, demanding they acquire new skills sets to keep working productively.

This leads to the question of how much time is required to learn a new skill or to top up knowledge. In schools and universities, the time taken to get a qualification is inherent in assessment. Not so in the VET system. This disparity gives rise to suspicion about the VET qualifications acquired in short courses or through recognition of prior learning (RPL). Sometimes such concern is entirely justified; at other times, depending on the student's prior experience and knowledge, it is not.

For India, it may be opportune to think about more fluid arrangements and concepts, perhaps centred on occupational competence and more generic abilities, in particular that of being able to keep on learning. Incorporating such notions into a qualifications system suggests a reliance on very good recognition of prior learning, particularly of informal learning on the job. Australia has been grappling with this and, while it has incentives in place to encourage recognition of prior learning, the system remains bound up in red tape, making it cumbersome and expensive.

Getting the content and outcomes of learning right

In Australia we have also been thinking about the extent to which competency-based training can develop the skills of the twenty-first century worker. Since the late 1990s there has been discussion about how to impart generic or employability skills—soft skills applicable to all sorts of jobs. Some parts of industry are also questioning whether competency-based training is capable of developing creative, innovative workers—the practical intellectuals we want in the twenty-first century world of work. Not only does this suggest the need for higher-level qualifications which incorporate more theoretical knowledge to underpin technical skills, it also poses the challenge of how best to help people learn to keep on learning. This is leading to a discussion about the need for more responsiveness than can be offered by training packages, the preparation and review of which can be a protracted exercise. In India, the need to respond nimbly has resulted in the Modular Employability Skills (MES) program, which aims to address the needs of early school leavers—about 63% of students leave school before Year 10 (Directorate General of Employment & Training 2009). In Australia, to meet the needs of both learners and employers, we hear talk about offering training in certain skills sets rather than full qualifications.

Ensuring good quality

In India, where the training system is facing the prospect of radical change, it is essential to build a strong, high-quality system that strives for the best learning outcomes and high levels of business integrity. Indian industry is keen to be involved in the establishment of the national qualifications framework and to ensure a strong component of on-the-job training (Federation of Indian Chambers of Commerce and Industry 2009?, p.8). While the suggestion here is to move towards a competency-based system, it may still be desirable to have a mechanism that ensures national consistency in the curriculum being taught across the country.

One interesting aspect of the Modular Employability Skills program mentioned above is the assessment regime, which sees trainees assessed independently, with allowance for recognition for skills acquired informally, and for nationally recognised certification. Giving industry a greater say in judging the quality of the standards it sets through involvement in assessment and in continuing education after graduation is a good approach. In Australia the involvement in these two areas needs consideration.

Assessment processes have implications for quality. While it is clear that a strict compliance regime to ensure the probity of providers is essential, there are other aspects of quality assurance we need to consider. These go beyond ensuring the right governance arrangements and sufficient infrastructure, to the quality of the training system's outputs. This demands a lot from auditors, who need to be able to see beyond compliance to continuous improvement, especially in terms of the results students achieve from their training.

Another quandary for the quality assurance system is the increasing focus on innovation. To be able to drive innovation, providers have to be in tune with local conditions and be able to adapt their offerings to suit their clients. That is hard to do if the regulator is a long way away and imposing one-size-fits-all solutions. The system has to be deft at ensuring good regulation that prevents poor training providers entering the market, as well as being able to remove those that do not comply with the rules—without suffocating providers' ability to tailor their training to suit their learners.

Engaging small business

Developing an industry-led system has been a major preoccupation in Australia and is not yet complete. There remains the challenge of encouraging enough business investment in the system, in particular from small and medium enterprises. This suggests that the challenge India faces in bringing vocational skills to the vast majority of the population who work outside the regulated economy is immense. Australia's experience is that it is the self-employed and small employers who engage least with formal vocational training. They cannot afford training courses and want only parts of what is in offer, to fulfil immediate needs; nor can they have people take time away from the job. What many of them do not realise is how much informal learning—of good and bad quality—in fact takes place in their workplaces. Where it is advantageous to the learner or the employer to recognise that informal learning—in India's case when seeking to build bridges into the formal part of the economy—the recognition process should not stifle its spontaneity and its affordability; hence, the importance of thinking about introducing skills sets as well as complete qualifications and of having a robust system of recognition of prior learning.

Equipping the teaching workforce

Are vocational teachers and trainers up to the job of meeting the targets we are setting, and to do this well? In India, getting enough trainers to deliver skills to half a billion students will be a gargantuan task and one most likely to rely on technology as well as people. In Australia we are concerned about the ageing of the VET workforce as well as the suitability of their professional qualifications to educate entry-level students, which can involve a good deal of general education in institutional settings. Teachers also need facilitation skills that help people increase the sophistication of their knowledge and competence while they work. This is a diverse set of

educational settings and suggests the need to reconsider how we categorise VET professionals, for example, into sub-groups such as adult educators, trainers or workplace mentors. Another challenge in Australia is generational. Older teachers are sometimes reluctant to use new technologies—the mobile phone, for example—to engage their learners. Nevertheless, much energy is being devoted to e-learning through, for example, the Australian Flexible Learning Framework (<<http://www.flexiblelearning.net.au>>), which should be a rich source of ideas for Indian teachers.

Understanding emerging skill needs

Can we prepare the training system to cater to emerging skills needs? One way Australia is attempting to do this is through the advisory body, Skills Australia, which is seeking to gather evidence about the future labour market and its skills requirements. However, getting precise forecasts of what needs to be learned, and when, is notoriously difficult. Sue Richardson, a leading labour market economist in Australia, suggests VET planners should not try to match training to projected skills needs in any precise way; they should instead focus on distinguishing skills that are in growing demand from those in declining demand and on skills that take a long time to learn and to gear up to teach (Richardson 2007).

This points to the need for good information about the training system, its clients and the labour market. We need to understand more about learning, for example, how people learn; what motivates them; how pathways work. We also need to know more about how businesses operate; what skills they require; and the interaction between training and industry. Here there is a role for research that informs policy development and helps practitioners.

Statistical data are also required to measure performance, to assist research, and, especially in a more demand-driven system, to provide students and employers with a sound basis to choose their training.

Independent research comes not only from academics but also from the sector. In Australia, good VET practice is based on strong connections with industry, which inform both what is taught and how. This is also a good basis on which to expand the role of VET in innovation diffusion.

Conclusion

The governments of India and Australia are working to enhance cooperation on training. The two countries are very different countries in terms of population, income per capita, and industry structures; yet they share features of relevance to the development of skills. Like Australia, India is a federation with responsibility for education and training shared between the national and state governments. In both countries, transport and distance are factors for many industries, and also have an impact on the way education is delivered. Although higher education is of considerable importance and highly valued in Australia and India, future gains in productivity will also depend on workers with intermediate-level knowledge and skills. This will lead not only to demand for whole vocational qualifications but also part-qualifications or skill sets. Flexible and adaptive VET programs will be required to meet these needs; such programs will have to be delivered in a way that meets acceptable standards both within our countries and beyond.

This suggests there is merit in facilitating further exchanges at the national government level, as well as between employer and industry groups. There is also scope to think more about cooperation on flexible delivery models that harness both technology and strong teaching skills. Both countries can learn and benefit from such engagement as they strive to equip themselves to prosper in the twenty-first century.

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